

IN THE CLAIMS:

1. (currently amended) A composition comprising a plurality of carbohydrate encapsulated nanoparticles, wherein each of said carbohydrate encapsulated nanoparticles comprises:

a) a core gold nanoparticle wherein said core gold nanoparticle consists essentially of gold, and wherein said core gold nanoparticle is about 4-20 nm in diameter;
and

b) a plurality of carbohydrate molecules attached to said core gold nanoparticle,
wherein said plurality of carbohydrate molecules comprises at least 150 carbohydrate molecules.

2. (original) The composition of Claim 1 further comprising an aqueous solution, wherein said plurality of carbohydrate-encapsulated nanoparticles are present in a non-aggregated state in said aqueous solution.

3. (original) The composition of Claim 2, wherein said aqueous solution has high ionic strength.

4. (previously presented) The composition of Claim 1, wherein said plurality of carbohydrate molecules are selected from the group consisting of: mannose molecules, 4-nitrophenylthiomannoside molecules, phenyl mannoside molecules, α-mannose molecules, mannose 6-phosphate molecules, mannose 1-phosphate molecules, GDP-mannose molecules, glucose molecules and galactose molecules.

5. (original) The composition of Claim 1, wherein said plurality of carbohydrate molecules are configured to bind a target molecule.

6. (previously presented) The composition of Claim 1, wherein said core gold nanoparticle is about 5-7 nm in diameter.

7. (previously presented) The composition of Claim 1, wherein said core gold nanoparticle is about 4-8 nm in diameter.

8. (original) The composition of Claim 1, wherein said plurality of carbohydrate molecules consists of about 150-250 carbohydrate molecules.

9. (original) The composition of Claim 1, wherein said plurality of carbohydrate molecules are thiolated.

10. (currently amended) A composition comprising a plurality of carbohydrate encapsulated nanoparticles, wherein each of said carbohydrate encapsulated nanoparticles comprises:

a) a core gold nanoparticle, wherein said core gold nanoparticle consists essentially of gold; and

b) a plurality of carbohydrate molecules, wherein said plurality of carbohydrate molecules comprises at least 150 carbohydrate molecules, and wherein said plurality of carbohydrate molecules are selected from the group consisting of mannose molecules, 4-nitrophenylthiomannoside molecules, phenyl mannoside molecules, α-mannose molecules, mannose 6-phosphate molecules, mannose 1-phosphate molecules, and GDP-mannose molecules.

11. (cancelled)

12. (original) The composition of Claim 10, wherein said plurality of carbohydrate molecules consists of about 150-250 carbohydrate molecules.

13. (original) The composition of Claim 10 further comprising an aqueous solution, wherein said plurality of carbohydrate-encapsulated nanoparticles are present in a non-aggregated state in said aqueous solution.

14. (original) The composition of Claim 13, wherein said aqueous solution has high ionic strength.

15. (original) The composition of Claim 10, wherein said plurality of carbohydrate molecules are thiolated.

16.-20. (cancelled)